

ABSTRACT OF THE DISCLOSURE

A range selector issues a range selection command signal representative of an operation range of a shift-by-wire type automatic transmission meeting with a driver's intention. The
5 operating range is at least one of P(parking)-range, R(reverse)-range, N(neutral)-range and D(drive)-range. An actuator causes the transmission to assume a certain operation range when receiving an instruction signal. A control unit issues the
10 instruction signal by processing the range selection command signal, so that the transmission is able to assume an operation range that meets with the driver's intention. The control unit is configured to carry out, when the range selector fails to issue the range selection command signal, presuming a range selection
15 intended by the driver based on a previous operation of the range selector; and based on the presumption, causing through the actuator the transmission to actually carry out at least one of first and second range selection operations. The first range selection operation meets with the driver's intention and the second range selection operation is to maintain the operation range that has
20 been kept just before the failure of the range selector.